



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,735	03/13/2001	James L. Taylor	PLNK-020	3846

7590 10/05/2004  
Peter R. Martinez  
Luce, Forward, Hamilton & Scripps, LLP  
11988 El Camino Real  
Suite 200  
San Diego, CA 92130

EXAMINER
----------

CHO, HONG SOL

ART UNIT	PAPER NUMBER
----------	--------------

2662

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/805,735	<b>Applicant(s)</b> TAYLOR, JAMES L.	
	<b>Examiner</b> Hong Cho	<b>Art Unit</b> 2662	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5 and 11-17 is/are rejected.
- 7) ☒ Claim(s) 3,4 and 6-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01-13-2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09232004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because it includes the title of the invention. Correction is required. See MPEP § 608.01(b).

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 5, 11, 13, 15, and 16 are rejected under 35 U.S.C. 102(e) as being unpatentable over Eatherton (U.S. 6697382).

Re claims 1 and 2, Eatherton discloses synchronizing network devices with global time counter (*synchronization among a plurality of net work devices having local clocks, figure 3a*).

Eatherton discloses updating a time counter with neighboring components to the global time generated from a master component (*adjusting the clocks of the network devices to be closer to the local of the first network device, column 1, lines 51-56; column 4, lines 1-6; column 6, lines 11-18*). Eatherton discloses a master component sending out an update

message to all components in network and neighboring components sending out an update message to all other components to propagate the global time throughout the packet switched networks (*broadcasting a first packet from a first network device to other network devices wherein the first packet includes a global time reference derived from the local clock of the first network device*, column 1, lines 57-64; column 3, lines 61-66).

Re claim 5, Eatherton discloses the component calculating new value of its global time based on the values of the global time of the sending system and the determined message delay (*adjusting the clocks of the network devices according to a linear function of the difference between the unadjusted value of the clock being adjusted and the broadcast global time reference*, column 7, lines 2-7).

Re claim 11, Eatherton discloses synchronizing a packet switching system periodically by sending out packets on a predetermined period of time (*as more data is transmitted, the local clocks of the receiving network devices are updated more frequently*, column 4, lines 27-33).

Re claims 13, 15, and 16, Eatherton discloses two components (*a transmitting/receiving network device*, figure 3a, elements 310 and 320) connected via links (*interface*, figure 3a, elements 319 and 329) with global time counter (*local clock*, figure 3a, elements 313 and 323), and control logic (*a processor configured to synchronize the local clock to the global clock*, figure 3a, elements 319 and 329).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eatherton.

Re claims 12, 14 and 17, Eatherton discloses maintaining a free running clock on the device (figure 3a, element 312). Eatherton fails to disclose explicitly determining the difference and calculating a first network offset between the free running clock and a first network global time. However, a method for clock offset estimation is well known in the art. Chuah et al. disclose estimating clock offset between the sender and the receiver (paragraph 0013, lines 5-7). Determining clock offset between the local clock and the global time reference is the first step in adjusting the local clock of the receiving network device to the global clock of the transmitting network device. Eatherton further fails to disclose synchronizing local clocks of the device to two different global time references, respectively where a given device is connected to two different networks. However, considering Eatherton's teaching on a device synchronizing its local clock with the global clock in one network, it would have been obvious to one having ordinary skill in the art at

Art Unit: 2662

the time the invention was made to apply Eatherton's system to a plurality of networks where a given device is using the same concept in adjusting its local clocks to be closer to the global clocks of the transmitting network, respectively.

***Allowable Subject Matter***

6. Claims 3, 4 and 6-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- US Patent (6069887) to Geiger et al. discloses method for synchronization in wireless LAN
  - US Patent (6628642) to Mile'n et al. discloses synchronization deviation detection
  - US Patent (6707828) to Wolf discloses synchronization of a network element in a synchronous digital communications network
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

Art Unit: 2662

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3088.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hong Cho  
Patent Examiner  
9-23-2004

  
RICKY NGO  
PRIMARY EXAMINER  
5/30/01